MISCELLANEOUS NOTES ON THE CULTURE OF THE TASMANIAN ABORIGINAL

By the late A. L. Meston'

DRINKING BOWL

A bowl formed from a skull cap was found on June 20, 1929, on a midden close to a spring of sweet water at Port Sorell, north coast of Tasmania. Its size and shape, together with the situation where it was found, suggest that it was used as a drinking bowl.

The bowl consists of parts of the frontal and parietal bones of a human skull (Plates A-C and fig. 1). It is not symmetrical, more of the right side of the skull-cap being present than the left, so that the sagittal suture is about 1.5 cm, nearcr to the left margin of the specimen. The lip of the bowl passes behind the frontal eminences anteriorly and through the lambda posteriorly; on the (anatomical) left side it passes just above the parietal eminence, being closer to the sagittal suture, and on the right side below the eminence, being farther from the sagittal suture.

The sagittal and coronal snures are well marked externally and faintly internally, characteristic of the bone condition of a young adult. The amount of bone remaining in the bowl is too small for definite racial classification of the skull, but there is little doubt that it is non-European and the features present are moreover in conformity with those of an aboriginal Tasmanian skull—external keeling towards the sagittal suture, post-coronal hollowing (more marked on the right side), relative absence of antero-posterior curvature in the frontal region, and increased width in the region of the parietal eminences.

The greatest length of the bowl is 150 mm.; the greatest width is 130 mm., in the region of the parietal eminences. The natural shape of the bones also means that the bowl is a little deeper

I should also like to thank Mr. S. L. Larnach of the Anatomy Department, University of Sydney, who carried out the photographic work.

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^{1.} This paper has been prepared from manuscript notes by Archibald Lawrence Meston, who died in Hobart on December 21, 1951. He was an authority on the Tasmanian aboriginal. Meston's extensive collection of Tasmanian stone implements and other materials was recently acquired by the National Museum of Victoria.

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posteriorly than auteriorly. The rim is irregular. The outer table of compact bone is lacking around part of the rim, principally on the frontal (Plate C and fig. 1), and the clear cut line along which this occurs suggests that removal of bone here may have been part of the process of shaping the bowl, to provide a thinner edge for the lips in drinking at the shallow anterior end. On the other hand the possibility that weathering might account for the erosion of bone cannot be excluded.

The Tasmanians, not having learnt to make pottery, found great difficulty in carrying water to their encampments. Shells were used but shells of a size sufficient to carry any quantity are rare in Tasmania. Labillardiere tells us that the women and girls brought water to the men who sat near their fires, using for the purpose vessels of sea-weed. Others describe similar vessels, Allan Cunningham, who visited Macquarie Harbor with Captain King in 1819, tells us that the natives he met, greatly prized bottles because they were so useful for holding water, calling such a vessel moka. The bowl here described is another most interesting moka.

A few examples are known of the use of skulls as water-vessels by other peoples, both contemporary and historic. There are several records of such use by the natives of south-eastern Australia. The skulls were either left more or less complete and provided with a carrying handle, or were reduced to a deep skull cap formed by the parietal bones and the greater part of the frontal and occipital bones; the sutures were made watertight with gum (*vide* Davidson, 1937). Three examples of these skullvessels are in the Australian Museum. In Europe the use of skullcaps for drinking vessels is known for Magdalenian times. The vessel here described is unique so far as Tasmania is concerned; it resembles the roughly shaped Magdalenian bowls rather than the carefully prepared mainland Australian aboriginal vessels.

BONE IMPLEMENTS

Up to the present the only Tasmanian aboriginal bone implements recorded have been the four specimens described by Crowther (1925, 1926). Noetling (1912) had earlier dealt with the question of the use of bone by the Tasmanians in the manufacture of implements but he considered there were no authentic instances of its use.

THE CULTURE OF THE TASMANIAN ABORIGINAL

A much larger collection of bone implements is now available for study, collected by me on field trips over the last twenty years. From the same localities have also been collected many pieces of broken bone, large points and " spatnlas " chiefly (Plate D); these fragments may have been used casually just after the whole bone was broken but do not show any working or other evidence of special shaping, or any wear.

The implements now recorded are of two distinct types, points and spatulas, and all are formed from parts of the long bones of mammals and, in one case, a bird.

Points or Awls.

These implements fall fairly clearly into two groups—

(a) broad points and (b) needle points.

(a) Broad points (Plate E).

The three examples of broadly pointed tools do not resemble each other closely. One (110 mm.) is larger than the others and has been made from a fragment of a long bone (? tibia of wallaby). with one end ground to a broad point (a). The two smaller specimens are both about 64 mm, long but otherwise have little resemblance (b and c). Specimen b is the upper part of the radius of a mammal (? wallaby), the shaft being ground obliquely to a broad point. Specimen c, on the other hand, is a fragment of a long bone of a bird, chipped and then ground to a broad point at one end and with the other end chipped to a roughly rounded shape. Both ends of this latter implement show much wear by The large cross section and thin wall of the fragment are use. suggestive of bone structure in the herons, of which group the " Blue Crane " (Notophoyx novachollandiac) is fairly common in Tasmania.

Specimens a and c were found in the Rocky Cape midden and b at Tiger Creek.

(b) Needle points (Plate F).

This series of points differs from the preceding group in that the point is long and rounded rather than short and broad. The implements have the form of awls or skewers and in two cases (c and d) are particularly sharp.

All the implements have been made from the upper end of the fibula of a kangaroo or wallaby, except in one case (a) where an ulua has been used (the point being ground obliquely down the shaft). The working end of the tool is formed from the shaft still 54.-18

and the grip from the end of the shaft and swollen terminal mass of bone (the epiphysis is not present, apparently having dropped off). The point has been formed by grinding, a long sharp needlelike implement being produced.

The lengths of the four longer implements range from 159 mm, to 190 mm, and of the three shorter ones from 91 mm, to 117 mm. (tips broken). Fibulae of the three Tasmanian Macropodidae have apparently been used in making these points, those of *Macropus tasmaniensis* in the largest, those of *Thylogale billardieri* in the smallest and the intermediate sizes made from fibulae of *Wallabia rufogrisea frutica*.

The specimens were found at Arthur River, south side (c, e, and h); Bottle Creek (b and d); Rocky Cape midden (a); and Tiger Creek (f). [No locality recorded for g.]

Sputulas (Plate G).

This type of implement consists of a long thin piece of bone one end of which forms a spatulate blade and the rest a grip. In making the spatula a fibula of kangaroo or wallaby has been used in all instances. The fibulae of these animals consist of a shaft and upper and lower expanded ends. The shaft in its lower twothirds is flattened and crescentic in section, the concave surface being directed medially towards the tibia; but in its upper third it is thicker and more rounded. The middle of the shaft is the thinnest part of the bone and is uniformly concavo-convex in section: It is from this part that the blade is made. Either the upper or lower part of the bone has been used in making the implement so that in one case the grip is more or less rounded and in the other crescentic in section.

The horizontal edge of the blade is rounded off where it meets the sides, and in all but two cases it is also trimmed at an angle, on the concave face, so that the tool has the shape of a gonge. Several of the blades are worn with use.

One implement (e) has been made by forming the blade from the head of the fibula, breaking it away obliquely.

The tools range from 112 mm, to 162 mm, long. In nearly all cases the fibulae used are apparently those of *Wallabia rufogrisca frutica*, but fibulae of *Macropus tasmaniensis* were used for making a few of the tools.

The specimens were found at a midden 12 miles south of Cape Sorell (g); Rocky Cape midden (f, j, and l); Tiger Creek (c and d); and the other seven specimens at Alert Creek.

194

All the bone implements described above come from a restricted area of Tasmania, the localities being within the area occupied by the western and north-western tribes. Rocky Cape is on the northern coast about 12 miles east of Circular Head and the other localities are on the western coast of Tasmania—Alert Creek, Tiger Creek, and Bottle Creek between Gardiner Point and Sundown Point, just south of the Arthur River; Cape Sorell is the sonthern point of Macquarie Harbor. Whether this localization is real or merely coincidence can only be shown by systematic examination of Tasmanian middens. The spatnlas described by Crowther (1925, 1926) were collected at Little Swanport on the east coast of Tasmania.

Pointed and spatulate bone implements are widespread in Australia.

There are no eyewitness accounts of the use of bone implements by the Tasmanians, so that we can only suggest, from their form, that some of these implements were used as awls, and others perhaps to remove molluscan food from the shell.

WOODEN IMPLEMENTS

Two interesting wooden implements were obtained by Mr. James, at the time Head Teacher at the State School, Marrawah, north-western Tasmania. Mr. James provided the following particulars: "The larger waddy was found on the property of Mr. Julius Green, about 3 miles north of the Marrawah School, by his son, Athol, who was removing stumps at the time. This would be about April, 1946. They brought it to me the next day. As soon as possible I went down to the area and examined it carefully. I found the smaller waddy and numerons artefacts..."

The larger implement (Plate H) is 257 mm. long and weighs 376 grms. It consists of a head and shaft. The head is roughly pear-shaped, the narrower part merging into the shaft. In crosssection the head is irregularly circular, with mean diameter about 72 mm. The shaft is thicker at the end away from the head, this part forming a grip. The diameter of the narrower part of the shaft is about 32 mm. and that of the grip about 36 mm.

The smaller implement (Plate I.) is 193 mm. long and weighs 252 grms. It consists of a head and shaft. The head is bulbons and rather irregular in shape, its mean diameter being about 79 mm. The shaft is short, attached eccentrically to the head, 8412/54.-19

and is slender in comparison with it. The diameter of the shaft is smallest, about 16 mm., near its junction with the head. At the end away from the head the shaft is expanded as a grip, about 29 mm. in diameter.

The smaller implement is very well preserved, the marks of shaping being quite clear over most of the surface, especially on the shaft. On the surface of the larger implement the marks of shaping are clear in a few areas, but most of the surface is more or less pitted with decay. The implements have apparently been shaped with a metal blade and not with a stone tool. The angles between the cuts are clean, the slices may be quite long, and markings are absent along the cut surface such as should be left by the irregular edge of a stone tool. These features are seen most clearly in the long sweeping cuts on the shaft of the smaller implement (Plate I.).

The use of a metal shaping tool does not invalidate aboriginal manufacture of the material, which seems definite from the circumstances of finding, but it does narrow the period during which the implements could have been made to about 35 years, the period of white contacts with the aborigines of north-western Tasmania. This period began about 1798 when the sealers first visited Bass Strait, passed through the first occupation of land, the Van Diemen's Land Company arriving at Circular Head in 1826, and ended when George Angustus Robinson removed the last of the tribes there in 1834.

Both implements appear to have been shaped from the lower end of the stem of a small tree or large bush, the head from the enlarged mass from which the roots arise (lignotuber) and the shaft from part of the stem above. The wood used for the larger implement is *Melaleuca squarrosa* and for the smaller implement *Leptospermum* sp.

Both implements balance well in the hand for nse as mallets, the smaller particularly so. However, there is no indication of their having been so used, the heads being free from marks of hammering. There is no crushing of the surface wood, the shaping cuts being clear on the heads (where the original surface has not decayed). It is suggested, therefore, that the implements might have been used as throwing clubs in hunting birds and small mammals. Root clubs are a widespread type of implement and were used, for example, by the mainland Anstralian aboriginal and by the Fijian.

196

MIDDENS

The systematic examination of Tasmanian aboriginal middens night be expected to yield information on several aspects of the life of those people, perhaps even on the length of time they were resident in Tasmania. With this in view an introductory study, which included some trenching in January, 1938, was made of the middens at Rocky Cape, near Stanley, north-western Tasmania.

The midden examined was a mound of material filling the mouth of a fissure, or cave, in the cliff. This fissure is inclined at an angle of 45-50 deg., and is narrower above. The mound almost fills the mouth of the cave and slopes steeply downwards inside it for about 30 feet; ontside, along the front of the cliff, it extends for about the same distance. The depth of material, as found by excavation, was just over 15 feet.

The following observations were made:—

- (a) The midden was essentially a mound of molluscau shells, chiefly the warrener, (Subminella undulata Martyn). Shells of the mutton-tish (probably Notohaliotis ruber Leach) were much less common and seldom found in some parts of the mound. Also noted were shells of oyster (Ostrea virescens Angas), dnekbill (Scatus antipodes Montfort), mussel (Mytilus planulatus Lamarek), limpet (Cellana limbata Philippi), volute (Scaphetla andulata Lamarek), whelk (Fasciolaria australasia Perry), and the cart-rut shell (? Dicathais orbita Gmelin).
- (b) Other animal material was represented by a number of bones viz.—

(1) Gypsophoca tasmanica Scott and Lord (Tasmanian Fur Seal): The main constituent of the vertebrate remains found in the midden. The bones, from several individuals, included parts of skull and mandible, limbs, ribs, and vertebrae.

(2) Vombatus ursinus tasmaniensis Spencer and Kershaw (Tasmanian Wombat): Part of a skull.

(3) ? Wallabia rufogrisca frutica Ogilby (Rednecked Wallaby). Portion of the skull of a kangaroo, apparently this species.

(4) *Pseudolabrus* sp. (Parrot Fish). A premaxilla (right) was found at the 12-13 ft. level in the midden.

- (c) The mound was black from grime and grease throughout all the upper part; in some places, as against the overhanging cliff wall, shells were charred from fires. There was a distinct lower layer in which the shells were free from ash and grime and merely yellowed from age. In this lower layer also bones were more plentiful.
- (d) Worked flakes were very uncommon, the majority of the implements being crudely shaped pieces of the local quartzite without secondary chipping, and there were a few well used hammer stones and many throwing stones. Some bone implements were also found.
- (e) There were no stratification layers and no evidence of changed culture, the same types of implements, both of bone and stone, being found throughout.
- (f) The finding of remains of a fish in a Tasmanian midden is of much interest, even though we must consider chance occurrence until other material has been found.² The few observers who saw the natives in their natural state and who comment on their diet, all say definitely that fish (as opposed to *cray*fish and *shell*fish) were not eaten. It may, however, be of importance that such observations were made on the aborigines of the eastern parts and not on the western and north-western tribes. Different food taboos appear to have existed among the tribes.

The question that must be asked is whether such a fish could have been caught by the natives, if not found washed up on the beach. There is no record of the use of hook and line, or of nets by the Tasmanians. An estuarine fish trap of stones, if ever made by the Tasmanians, would not eatch the parrot fish, which lives off rocky coasts.

The habits of the parrot fishes suggest the possibility that they could be caught by the women while seeking the crayfish and molluscs which formed so large a part of the diet. These fish are slow-swimming and lurk in the kelp in shallow water off rocky coasts,

^{2.} Members of the A.N.Z.A.A.S. Anthropology Section Excursion in January, 1949, picked up fish bones on the Rocky Cape site. E. D. Gill has also (*Wild Life*, Oct. 1952, p. 344) found numerous bones of parrot fish in this midden.

where they feed. Under such conditions they could probably be caught in the hands, either by the efforts of one or a group of women, and if not caught directly in the hands they might be forced into the baskets carried by the women when fishing, or be grasped in a mass of kelp in which they were hiding.

Such fish could also be speared from the rocks by the men, or captured by a native thrusting a spear into or under water.

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During December, 1952 the writer, whilst in London, purchased some aboriginal wooden implements, among which was a nobby-ended waddy. This was marked "Tasmania", and was said to have been part of the well-known Oldman collection. It is illustrated in Fig. 2 and is now in the National Museum collection no. 52907.

Its dimensions and weight are as follows:—

Overall length		70 cm.	$(27 \cdot 6 \text{ ins.}).$
Length of handle		62 cm.	$(24 \cdot 4 \text{ ins.}).$
Diameter of knob		$8\cdot7$ cm.	(3.43 ins.).
Diameter of handle		$2 \cdot 2$ cm.	to 1.6 cm.
Weight	• •	$538 \cdot 5$ gm	, (19 oz.).

It appears to have been fashioned from a thin shoot of Leptospermum or similar type of wood, about 2.5 cm. in diameter, with an enlarged root. The handle is somewhat crooked, and has been roughly reduced in thickness, apparently by means of a stone tool and shows a number of long smooth facets. These could be the result of using a large chipped flake tool grasped in the two hands and planing off the bark and some of the sapwood, with the inner or flat surface of the tool bearing on the surface of the object.

The proximal or handle end is roughened by a series of cross cuts; in this case by using the chipped edge of the tool. The knob end has been finished off possibly by using a piece of coarse grained rock, giving one the impression that a steel rasp had been employed.

A further confirmation of the use of this type of club by the Tasmanians, was the finding of a similar waddy, unearthed from a kitchen-midden at Eaglehawk Neck in Tasmania and described with an illustration in *Walkabout*, November, 1953, by J. A. Fletcher. He states "As far as has been ascertained, there were no aborigines on Tasman Peninsula when the settlement took place in 1830. It must have been before that date that the midden was last occupied by the blacks."

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